Virus Name: Tindholmur	Abbreviation: TDMV

Status
Possible Arbovirus

Select Agent
No

SALS Level

SALS Basis

Other Information

Antigenic Group
Kemerovo

SECTION I - Full Virus Name and Prototype Number

Prototype Strain Number / Designation
DenAr 2

Accession Number

Original Date Submitted
12/25/1984

Family
Reoviridae

Genus
Orbivirus

Information From
Andrew J. Main

Address
Yale Arbovirus Research Unit; P.O. Box 3333; New Haven, Connecticut 06510, USA

Information Footnote

Section II - Original Source

Isolated By (name)
Andrew J. Main

Isolated at Institute
YARU

Host Genus
Ixodes (Ceratixodes) uriae (= I. (C.) putus)

Species

Host Age/Stage
11 adults

Sex
Female

Isolated From

Isolation Details

Signs and Symptoms of Illness

Arthropod
Engorged

Time Held Alive before Inoculation
16 days

Collection Method
By hand

Collection Date
7/22/1974

Place Collected (Minimum of City, State, Country)
Tindholmur, Faeroe Islands, Denmark

Latitude
62° 5' N

Longitude
7° 30' W

Macrohabitat
Common puffin (Fratercula arctica) colony

Microhabitat

Method of Storage until Inoculated
Held alive

Footnotes

Section III - Method of Isolation

Inoculation Date
8/8/1974

Animal (Details will be in Section 6)
nb mice

Route Inoculated
Intracerebral

Reisolation
No

Other Reasons

Homologous Antibody Formation by Source Animal

Test(s) Used

Footnotes

Section IV - Virus Properties

Physicochemical
RNA, Double Strand

Pieces (number of genome segments)
10

Infectivity

Sedimentation Coefficients(s) (S)

Percentage wt, of Virion Protein

Lipid

Carbohydrate

Virion Polypeptides: Number

Details

Non-virion Polypeptides: Number

Details

Virion Density

Sedimentation Coefficients(s) (S)

Nucleocapsid Density

Sedimentation Coefficients(s) (S)

Stability of Infectivity (effects)

pH (infective range)

Lipid Solvent (ether - % used to test)

After Treatment Titer

Control Titer

Lipid Solvent (chloroform)

After Treatment Titer

Control Titer

Lipid Solvent (deoxycholate)

After Treatment Titer

Control Titer

Other (formalin, radiation)

Virion Morphology

Shape

Dimensions

Mean
nm

Range
nm

Measurement Method

Surface Projections/Envelope

Nucleocapsid Dimensions, Symmetry

Morphogenesis

Site of Constituent Formation in Cell	Site of Virion Assembly	Site of Virion Accumulation
Inclusion Bodies	Other	

Hemagglutination

Hemaggiutination	Antigen Source	Erythrocytes (species used)
No	**SMB ext. by sucrose-acetone**	**Goose**
pH Range **5.8-7.4**	pH Optimum	
Temperature Range **4dC, 22dC, 37dC**	Temperature Optimum	

Remarks

Serologic Methods Recommended
CF, NT

Footnotes

Section V - Antigenic Relationship and Lack of Relationship to Other Viruses

Antibodies or Antigens	Tindholmur (DenAr 2) Antigen CF Ht/Ho	Antigen NT Ht/Ho	Ascitic Fluid CF Ht/Ho	Ascitic Fluid NT Ht/Ho
Tindholmur (DenAr 3)	16/8	1.8/1.8	8/32	2.1/2.4
Mykines (DenAr 7)	32/32	0.8/1.2	8/32	0.7/2.4
Mykines (DenAr 8)	8/16	0.8/2.1	4/32	0.0/2.4
Mykines (DenAr 10)	32/512	0.7/2.6	128/32	0.4/2.4
Mykines (DenAr 12)	32/256	0.5/2.6	64/32	0.4/2.4
---------- (FinV-808)	256/1024		64/32	
---------- (FinV-873)	128/256		16/32	
---------- (FinV-962)	64/64		64/32	
Cape Wrath (ScotAr 20)	64/32	0.0/2.6	64/32	0.0/2.4
Great Island (CanAr 41)	128/128	0.5/2.7	64/32	0.2/2.4
Pauline (CanAr 14)	128/128	0.0/3.0	32/32	1.0/2.4

Baduine (CalAr 14)	128/128	0.0/3.0	32/32	1.0/2.4
Yaquina Head (RML-15)	32/128	0.0/3.3	64/32	0.9/2.4
Okhotskiy (LEIV 287ka)	32/64	0.0/3.3	32/32	0.5/2.4
Nugget (AusMI-14847)	128/256	0.0/3.6	128/32	0.2/2.4
Kemerovo (R-10)	64/512	0.5/>1.5	64/32	0.0/2.4
Tribec (Original)	32/128	0.0/2.7	16/32	0.0/2.4
Lipovnik (Lip 91)	32/128	0.6/4.2	16/32	0.0/2.4
Chenuda (EgAr 1152)	<4/128		4/32	
Baku (LEIV 46A)	16/512		16/32	
Mono Lake (CalAr 861)	8/256		8/32	
Huacho (CalAr 883)	<4/128		16/32	
Wad Medani (EgAr 492)	<4/128		4/32	

NT: LNI in dex

Section VI - Biologic Characteristics

Virus Source (all VERTEBRATE isolates)

Lab Methods of Virus Recovery (ALL ISOLATIONS)
Newborn mice

Cell system (a)	Virus passage history (b)	Evidence of Infection							
		CPE			PLAQUES			Growth Without CPE	
		Day (c)	Extent (d)	Titer TCD50/ml (e)	Day (c)	Size (f)	Titer PFU/ml (e)	+/- (g)	

Section VII - Natural Host Range (Additional text can be added below table)

Vertebrate (species and organ) and arthropod	No. isolations/No. tested	No. with antibody/No. tested Test used	Country and region
Ixodes uriae	2/58		Tindholmur, Faeroe Islands, Denmark
Ixodes uriae	0/61		Mykines, Faeroe Islands, Denmark
Ixodes uriae	0/17		Nolsoy, Faeroe Islands, Denmark

Section VIII - Susceptibility to Experimental Infection (include viremia)

Experimental host and age	Passage history and strain	Inoculation Route-Dose	Evidence of infection	AST (days)	Titer log10/ml
Mice (nb)	DenAr 2, SM 2-4	ic	Paralysis, death	4	6.3-6.9
Mice (nb)		ip			
Mice (nb)		sc			
Mice (wn)		ic			
Mice (wn)		ip			

Section IX - Experimental Arthropod Infection and Transmission

Arthropod species & virus source(a)	Method of Infection log10/ml (b)		Incubation period (c)		Transmision by bite (d)		Assay of arthropod, log10/ml (e)		
	Feeding	Injected	Days	°C	Host	Ratio	Whole	Organ	System

Section X - Histopathology

Character of lesions (specify host)

Inclusion Bodies — Intranuclear

Organs/Tissues Affected

Category of tropism

Section XI - Human Disease

In Nature	Residual	Death
Subclinical	Overt Disease	
Clinical Manifestations		
Number of Cases	Category (i.e. febrile illness, etc.)	

Section XII - Geographic Distribution

Known (Virus detected)
Faeroe Islands, Denmark

Suspected (Antibody only detected)

Section XIII - References

1. Main, A.J. 1978. J. Med. Ent. 15:11-14.

Remarks